

## CLAIMS

1. A plasticizing apparatus for resin material including a plasticizing barrel for heating and plasticizing a resin material, the plasticizing apparatus for resin material comprising:

a heat source outside the plasticizing barrel; and  
a heat transfer piece shaped like a ridge, being formed on an inner surface of the plasticizing barrel into which the resin material is fed, which transfers heat from the heat source outside the plasticizing barrel to the resin material in the plasticizing barrel.

2. The plasticizing apparatus for resin material according to claim 1, wherein the heat transfer piece is formed into a spiral in a line or a plurality of lines along an axial line of the plasticizing barrel on the inner surface of the plasticizing barrel.

3. The plasticizing apparatus for resin material according to any one of claims 1 and 2, further comprising a heat receiving piece being formed in a protrusion condition on an outer surface of the plasticizing barrel, which receives heat from a heater being the heat source outside the plasticizing barrel,

wherein the heater is fit in contact with the outer surface of the plasticizing barrel and side surfaces of the heat receiving piece.

4. The plasticizing apparatus for resin material according to claim 3, wherein the heat receiving piece

is formed into a spiral in a line or a plurality of lines on the outer surface of the plasticizing barrel, and the heater is screw threaded in a pitch of the heat receiving piece to fit to be mountable and demountable on the outer surface of the plasticizing barrel.

5. The plasticizing apparatus for resin material according to claim 3, wherein the heat receiving piece is formed in a plurality of approximately straight lines along the axial line on the outer surface of the plasticizing barrel, and the heater formed in a plurality of lines is slid in the heat receiving piece in a plurality of lines to fit to be mountable and demountable on the outer surface of the plasticizing barrel.

6. The plasticizing apparatus for resin material according to any one of claims 3 to 5, further comprising a heat insulator, being formed into a cylinder, which covers the outer surface of the plasticizing barrel, wherein the heater is fit on an inner surface of the heat insulator, so that the heat insulator and the heater are fit integrally to be mountable and demountable on the outer surface of the plasticizing barrel.

7. The plasticizing apparatus for resin material according to any one of claims 1 to 6, further comprising:

an opening, being formed in a lateral wall of the plasticizing barrel, for feeding the resin material; and

a radiating member, being disposed in a protrusion condition on the outer surface of the plasticizing barrel

in the vicinity of the opening, which radiates heat in the plasticizing barrel.

8. A plasticizing apparatus for resin material including a plasticizing barrel for heating and plasticizing a resin material, the plasticizing apparatus for resin material comprising:

an opening, being formed in a lateral wall of the plasticizing barrel, for feeding the resin material; and

a radiating member, being formed on an outer surface of the plasticizing barrel in the vicinity of the opening, which radiates heat in the plasticizing barrel.